

What is claimed is:

1. A method of producing a multicast tree for a multicast in a network, the network including a plurality of network devices that are members of the
5 multicast, a set of the network devices each including a multicast database that is protocol independent, the method comprising:

locating the multicast database within each of the set of the network devices;

retrieving multicast information from each located multicast database;

10 and

tracing the retrieved multicast information across the plurality of network devices to form the multicast tree.

2. The method as defined by claim 1 wherein the multicast includes a root
15 node, the retrieved multicast information being traced from the root node, the root node being one of the plurality of network devices.

3. The method as defined by claim 1 wherein the network implements the Internet Protocol.

4. The method as defined by claim 1 wherein the set of network devices includes a unicast database having network information, the unicast database being protocol independent, the method further including:

locating the unicast database within each of the set of network devices;

25 retrieving network data from each unicast database; and

using the retrieved network data to form the multicast tree.

5. The method as defined by claim 1 wherein each multicast database is a management information base.

6. The method as defined by claim 1 wherein at least one of the plurality of network devices includes a protocol dependent multicast database, the multicast tree being formed free from any data retrieved from the protocol dependent multicast database.

7. The method as defined by claim 1 wherein the retrieved multicast information is traced by an application incorporating the Simple Network Management Protocol.

8. The method as defined by claim 1 wherein the set of network devices includes no more than one of the plurality of network devices.

9. The method as defined by claim 1 wherein the set of network devices includes a first network device and a second network device, each multicast database including a set of multicast data, the set of multicast information being different in the multicast database in the first network device than the set of multicast information in the multicast database in the second network device.

10. An apparatus for producing a multicast tree for a multicast in a network, the network including a plurality of network devices that are members of the multicast, a set of the network devices each including a multicast database that is protocol independent, the apparatus comprising:

a multicast database processing module, the multicast database being capable of processing module locating the multicast database within each of the

set of the network devices, the multicast database module also being capable of retrieving multicast information from each located multicast database; and

a tracing module operably coupled with the multicast database processing module, the tracing module being capable of tracing the retrieved multicast
5 information across the plurality of network devices to form the multicast tree.

11. The apparatus as defined by claim 10 wherein the multicast includes a root node, the tracing module tracing the retrieved multicast from the root node, the root node being one of the plurality of network devices.

12. The apparatus as defined by claim 10 wherein the network implements the Internet Protocol.

13. The apparatus as defined by claim 10 wherein the set of network devices
15 includes a unicast database having network information, the unicast database being protocol independent, the apparatus further including:

a unicast database processing module for locating the unicast database within each of the set of network devices, the unicast database processing module also retrieving network data from each unicast database, the retrieved
20 network data being used to form the multicast tree.

14. The apparatus as defined by claim 10 wherein each multicast database is a management information base.

25 15. The apparatus as defined by claim 10 wherein at least one of the plurality of network devices includes a protocol dependent multicast database, the multicast tree being formed free from any data retrieved from the protocol dependent multicast database.

16. The apparatus as defined by claim 10 wherein the retrieved multicast information is traced by an application incorporating the Simple Network Management Protocol.

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17. The apparatus as defined by claim 10 wherein the set of network devices includes no more than one of the plurality of network devices.

18. A computer program product for use on a computer system for producing
10 a multicast tree for a multicast in a network, the network including a plurality of network devices that are members of the multicast, a set of the network devices each including a multicast database that is protocol independent, the computer program product comprising a computer usable medium having computer readable program code thereon, the computer readable program code
15 comprising:

program code for locating the multicast database within each of the set of the network devices;

program code for retrieving multicast information from each located multicast database; and

20 program code for tracing the retrieved multicast information across the plurality of network devices to form the multicast tree.

19. The computer program product as defined by claim 18 wherein the multicast includes a root node, the program code for tracing the retrieved
25 multicast information from the root node, the root node being one of the plurality of network devices.

20. The computer program product as defined by claim 18 wherein the network implements the Internet Protocol.

21. The computer program product as defined by claim 18 wherein the set of network devices includes a unicast database having network information, the unicast database being protocol independent, the computer program product further including:

program code for locating the unicast database within each of the set of network devices;

program code for retrieving network data from each unicast database; and
program code for using the retrieved network data to form the multicast tree.

22. The computer program product as defined by claim 18 wherein each multicast database is a management information base.

23. The computer program product as defined by claim 18 wherein at least one of the plurality of network devices includes a protocol dependent multicast database, the multicast tree being formed free from any data retrieved from the protocol dependent multicast database.

24. The computer program product as defined by claim 18 wherein the program code for tracing implements the Simple Network Management Protocol.

25. The computer program product as defined by claim 18 wherein the set of network devices includes no more than one of the plurality of network devices.

26. An apparatus for producing a multicast tree for a multicast in a network, the network including a plurality of network devices that are members of the multicast, a set of the network devices each including a multicast database that is protocol independent, the apparatus comprising:

- 5 means for locating the multicast database within each of the set of the network devices;
- means for retrieving multicast information from each located multicast database; and
- means for tracing the retrieved multicast information across the plurality
- 10 of network devices to form the multicast tree.

27. The apparatus as defined by claim 26 wherein the set of network devices includes a unicast database having network information, the unicast database being protocol independent, the apparatus further including:

- 15 means for locating the unicast database within each of the set of network devices;
- means for retrieving network data from each unicast database; and
- means for using the retrieved network data to form the multicast tree.

- 20 28. The apparatus as defined by claim 26 wherein each multicast database is a management information base.